REMARKS

An RCE has been filed along with this amendment to ensure entry and substantive consideration. Accordingly, reconsideration and allowance of the subject application are respectfully requested.

As requested in the last response, the Examiner is requested to acknowledge Applicants' claim for foreign priority under 35 U.S.C. §119.

Claim 1 stands rejected under 35 U.S.C. §112, first paragraph as not being "fully developed." Although Applicants do not believe this is an appropriate basis for a rejection under 35 U.S.C. §112, first paragraph, in an effort to advance prosecution of this application, claim 1 is amended along the lines requested in paragraph one of the office action. Withdrawal of this rejection and allowance of claims 1-5 are requested.

Applicants note with appreciation the Examiner's indication of allowable subject matter in claims 9, 10, 14-16, and 20-22. Claim 16 has been rewritten in independent claim format. Thus, claims 14-16 should be allowed.

Claism 6-8, 11-13, 17-19 stand rejected under 35 U.S.C. §103 as being unpatentable over newly-cited Zhang. This rejection is respectfully traversed.

Zhang teaches two power control loops (see column 3, lines 26-33). A first loop, called a "transmit power control" that includes the BTS and each CPE unit, is used for adjusting the transmit power at each CPE unit. A second control loop, called "receiver range control", is used to adjust the position of the BTS receiver dynamic range so as "to shift the position of the BTS receiver dynamic range to a location where all the upstream signals can be received" (column 5, lines 8-12 with emphasis added).

The disadvantage of the approach described by Zhang is that in order to be effective in Zhang's system, many frequent radio transmission power control messages must be transmitted from the receiving node to each of the remote access terminals. Those many control messages take up too much of the valuable radio channel bandwidth.

In contrast, claim 6 describes a slower radio control loop where messages are sent less frequently, but effective control is ensured using the fast AGC in the receiver node which individually adjusts the gain for each signal received. The non-limiting embodiment describes the that the slower radio control loop can set the transmit power levels for each remote terminal slightly high and then the fast AGC can attenuate the received signal if necessary and by an amount tailored to the individual terminal signal. The local fast AGC is very fast, e.g., it may operate in the guard time that separates two received bursts. Consequently, there radio control loop need not send out as frequent power control messages over the radio interface, thereby saving substantial radio bandwidth.

The node in claim 6 includes a local control loop in the node that is "activated through a fast AGC used as a dynamic buffer to adjust the signal power level of each individual terminal input." Claim 6 specifies that the fast AGC "discriminate[s] a single terminal signal." Zhang's local AGC determines an adjustment for a BTS receiver range window position that is common to all of the terminals. In other words, Zhang's local AGC in the BTS does not make individual adjustments for the remote terminals. As a result, Zhang's local AGC in the BTS does not allow "a reduced number of control messages to be transmitted in the radio control loop to each of the remote access terminals," as recited in claim 6. Claims 11 and 17 recite features similar to the features.

At best, Zhang's BTS receiver range window adjustment corresponds to the slow AGC recited in dependent claim 7, i.e., a "slow AGC common to all of the remote access terminals that balances changes in gain of the reception chain of the node for all of the remote access terminals." This further supports the fact that Zhang's BTS receiver range window adjustment can not correspond to the claimed fast AGC. And as the Examiner recognizes, it simply does not make sense to try and read the claimed fast AGC onto Zhang's CPE terminal transmit power level control.

On page 4 of the official action, the Examiner attempts to dismiss the fact and the significance of the fast and slow AGC loops using alleged "Official Notice." Applicants respectfully disagree. The Examiner is not permitted to use "Official Notice" when Applicants challenge that position as they do now. A reference which shows both fast and slow AGC in addition to a transmission power control loop is requested. The Examiner is also requested to provide a motivation from the prior art to modify Zhang to include both fast and slow AGC.

Regarding clam 23, 25, and 27, Applicants request the Examiner provide a reference to support the Official Notice position stated with respect to claim 7 in the final office action.

Regarding claims 8, 13, and 19, the Examiner is requested to provide evidence to support the contention that because "the Zhang system is operable as designed, stability is not an issue." Moreover, it is not clear how Zhang's operability has any bearing on the claim feature of "the operative bandwidths of the slow AGC control loop, the fast AGC control loop, and the radio control loop are sufficiently distinct in order to ensure stability of the system." This is particularly so given that the Examiner admits that Zhang lacks both a slow and fast AGC.

The application is now in condition for allowance. An early notice to that effect is earnestly solicited.

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Respectfully submitted,

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